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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,729	10/03/2005	Shinichi Sakai	38833	4327
53054 7590 09/15/2008 PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108				
EXAMINER				
MAL ANH T				
ART UNIT		PAPER NUMBER		
2832				
NOTIFICATION DATE		DELIVERY MODE		
09/15/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/551,729

Applicant(s)

SAKAI ET AL.

Examiner

Anh T. Mai

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/86)
Paper No(s)/Mail Date 10/05/90/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinichiro et al. [JP10-02720] in view of Yutaka et al [2001-052935].

Shinichiro discloses:

- a bobbin 5 having a primary winding 1 and a secondary winding 21 wound thereon; and
- a core 4 inserted into a center of said bobbin;
- wherein a winding area of said secondary winding is divided into two areas while interposing a partition wall as shown in figure 2.

Shinichiro discloses the invention as claimed as cited above except for the width of the winding is smaller than 11 times of diameter of the coil. Yutaka discloses the width W1 of the winding 20 is smaller than the width T1 of the wire [T1 is number of turn multiplied by d as shown in figure 1 and Abstract. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the width of the winding as taught by Yutaka to the device as disclosed by Shinichiro. The motivation would have been to facilitate securing insulation distance between points whose potential difference is large in the internal structure [Abstract]. Therefore, it would have been obvious to combine Yutaka with Shinichiro.

With respect to claim 3, figure 3 of Shinichiro shows that three secondary coils are arranged in the width direction and the width T1 of each winding range is larger than the thickness T2 of the isolation wall.

With respect to claim 2, Yutaka discloses the winding 20 under irregular state as shown in figure 1.

3. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shinichiro et al. in view of Yutaka et al as applied to claim 1 above, and further in view of Makoto et al. [JP 07-161462].

Shinichiro et al. in view of Yutaka et al discloses the invention as claimed as cited above except for the wire is Litz wire. Makoto discloses the primary coil 2 composed of Litz wire [abstract]. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Litz wire as taught by Makoto to the device as disclosed by Shinichiro et al. in view of Yutaka et al. The motivation would have been to reduce the impact of the skin effect and the proximity effect [known as principle operation of the Litz wire]. Therefore, it would have been obvious to combine Makoto with Shinichiro et al. in view of Yutaka.

With respect to claim 5, Makoto discloses high-voltage components 20 constituting a voltage doubler rectifier circuit 14 for rectifying a high frequency high voltage from said secondary winding of said booster transformer are held integrally with said bobbin as shown in figure 7 and paragraph [0022].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh T. Mai whose telephone number is 571-272-1995. The examiner can normally be reached on 5/4/9 Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anh T. Mai/
Primary Examiner, Art Unit 2832

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